# This Page Is Inserted by IFW Operations and is not a part of the Official Record

### BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

# IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents will not correct images, please do not report the images to the Image Problem Mailbox.

### MINISTRY OF INDUSTRY, COMMERCE AND CRAFTS D.G.P.I. – ITALIAN OFFICE OF PATENTS AND TRADEMARKS

#### INDUSTRIAL INVENTION PATENT

No. 01250630

This patent is granted for the invention which is the object of the application specified below

$\prod$	Application Number	Year	Office	Application Date	Class	
H	001846	91	MILAN	07/04/1991	B-01F	



REPRESENTATIVE

CIOGNA FRANCO

**ADDRESS** 

PROF. FRANCO CICOGNA

VIA VISCONTI DI MODRONE 14/A

TITLE

MIXER SHAKER CLOSET STRUCTURE FOR PAINTS,

WITH PROTECTION DEVICES

INVENTOR

**DESINANO CARLO** 



Rome, APRIL 21, 1995

THE MANAGER (GIOVANNA MORELLI)

#### MODULE A

## NSTY OF INDUSTRY. COMMERCE AND CRAFTS

CENTR	AL PA	TENTS OFFICE	E – ROME	ERCE AND C.	CAI 15		MODOLLIT
Α.	APPLICA  1)  2)	ANT (I) Denomination Domicile Denomination Domicile	TECMEC S.R.L ALBAIRATE (M	I)			
3.	Surname Registere	ANT'S REPRESE! First Name ed Name of the Lav ISCONTI DI MOI		ICO TS OFFICE, PRO	F. FRANCO C	CICOGNA MI 20122	
C. D.	Street TITLES	ENT'S CHOICE OF	No.	City diclass (Sez/d/scl or PAINTS, WITI	zip. ) H PROTECTIO	ON DEVICÉS"	
E.	DESIGN	ATED INVENTO	R Surnam	e First Name	Surname F	irst Name	
F. G.	CENTE	nd organization R QUALIFIED FO	Type of priority R COLLECTION C	Application Nur F MICROORGAN		Filing Date RE, denomination	Attachment S/R
Н.	SPECIA	L ANNOTATION:	5				
Doc. 1 Doc. 2 Doc. 3 Doc. 4 Doc. 5 Doc. 6 Doc. 7 8) 9) COMPII	[2] [2] [1] [0] [0] [0] Payment Stamp for LED	PROV No. Parsets) PROV No. Parsets) PROV No. Parsets) PROV No. Parsets) PROV No. Parsets RIS RIS RIS RIS RIS RIS Treceipt, Total Lire 07/04/1991 N(YES/NO) ED COPY REQUE	oles 06	Compulsory if of Cover letter for Inventor design Priority docume Authorization of Complete noming YEARS	pices, reference ation ent with translar conveyance anation of the p	otion, 2 sets ence to general pration to Italian act	lsory
MINUT	ES OF FI	ousand nine hundr	M. & CRAFT CATION NUMBER red and NINETY Of re presented to me the	NE day FOU	6 R month of		or the concession o

the patent indicated above.

VARIOUS ANNOTATIONS OF THE REGISTRY OFFICIAL

**FILER** 

REGISTRY OFFICIAL

[STAMP: Illegible]

G. RESCALI

SCHEDULE A

SUBJECT OF THE INVENTION WITH MAIN DRAWINGS, DESCRIPTION AND CLAIMS
APPLICATION NUMBER H1912 -001866 REG.A FILING DATE 07/04/1991
PATENT NUMBER RELEASE DATE

"MIXER SHAKER CLOSET STRUCTURE FOR PAINTS, WITH PROTECTION DEVICES"

1. Summary

This invention has as its object a mixer shaker closet structure for paints, with protection devices, which comprises a load bearing frame, which presents a plurality of shelves for support of applurality of containers, provided with butterfly connections to the shaker device, which are detachable and may be housed in channels of the frame, where fins are foreseen to set the butterfly connection in rotation. The specificity of the invention is constituted by the fact of including, for each channel, a detachable protection section, which may be superimposed in view of the insertion of the butterflies in the channels. There are, besides, motorized means foreseen, for the activation of the fins, which are linked to the means of activation of the protection sections.

DRAWING



[Stamp]:
Via Visconti di Modrone
Milan 29112
FECHNICAL LEGAL
PATENTS
OFFICE
Prof. FRANCO CICOGNA



#### TECMEC SRL

of Italian nationality, with head office at Albairate - (Milan) - and choosing domicile at the Patents Law Office of Prof. Franco Cicogna in Via Visconti di Modrone 14/A, Milan

Filed on JULY, 4, 1991 as No. MI 91 A/01946

This invention has as its object a unixer shaker closet structure for paints, with protection devices.

As is known, mixer shaker closets for paints exist in the market, normally used in body shops or similar, that are structured with a load bearing framework, which presents a plurality of shelves, on which are deposited the various paint containers, usually provided with a cover, provided with an external fork, which is connected to a means for mixing and shaking the paint, placed inside the can itself.

Such a fork is inserted in the closet, so as to couple it with the fins, connected to motorized means, which, on command, can be set in rotation, so as to cause the fork to rotate and, consequently the mixer blade inside each container.

With these types of closet, the reciprocal coupling zone between the fins and the forks, turns out to be inadequately protected, thus permitting that, inadvertently, the user may place a finger or other body parts between the fin and fork, with possible serious risks.

Another drawback, imputable to solutions of the known technique, arises from the fact that generally, the removal and the introduction of the containers in the closet is not easy, with problems connected to the correct coupling between fins and forks.

The task the invention proposes is to eliminate the previously described drawbacks, by realizing a mixer shaker closet structure for paints, with means of protection, which is capable of adequately protecting the coupling zone between fins and forks of the containers, so that it is possible to introduce a hand,

DRAFT

accidentally or intentionally, into the coupling zone, when the motors are in operation.

Specifically, such a shaker mixer closet structure for paints, with protection devices, allows facilitating the insertion and removal of the varied containers without disadvantages of any kind, in the coupling between fin and fork.

In addition, the aforesaid shaker mixer closet structure, from its particular characteristics which may be realized, is able to afford the fullest guarantee of reliability and safety in use.

Finally, the mixer shaker closet structure for paints in points is easily obtainable using elements and materials commonly available off the shelf and, therefore, it is highly competitive, from the economic point of view.

The above stated task, as well as the mentioned purposes and others, which will be shown better below, are attained by a mixer shaker closet structure for paints, with protection devices, according to the invention, including a load bearing frame, which presents a plurality of shelves for the support of a plurality of containers.

These latter are provided with a fork for connection to the shakers devices, housed in channels of the frame, where fins are foreseen, to set the fork itself in rotation.

The above mentioned mixer shaker closet structure for paints is characterized by the fact of including, for each channel, a protection profile, detachable and which may be superimposed from the point of view of insertion of the forks in the channels.

There are, besides, drive motors foreseen, for the activation of the fins, subjected to the activation mean of the protection profiles.

Additional characteristics and advantages of the invention will mostly be shown from an activation of the fins, subjected to the activation mean of the protection profiles.

examination of the description of a preferred, but not exclusive, execution form of a mixer shaker closet structure for paints, with protection devices, illustrated for indicative purposes, but not restricted thereto, with the assistance of the attached drawings, in which:

Figure 1 represents schematically, in perspective view, the closet structure;

Figure 2 represents the closet, in frontal view, with protection section arranged in



the open position, to allow the removal and the introduction of the containers;

Figure 3 represents, in frontal view, the closet with the protection section closed to prevent the access to the coupling zone between fin and fork,;

Figure 4 represents, in cross section, the protection profile, in the open position:

Figure 5 represents, in cross section, the protection section, in the closed position;

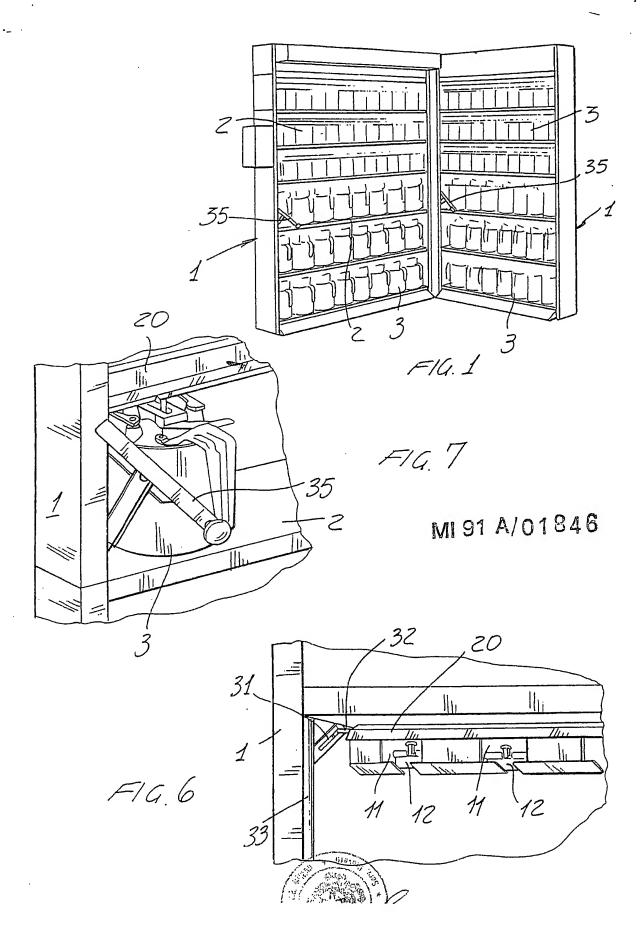
Figure 6 shows, in perspective view, the details of a channel, with the protection section in the open position.

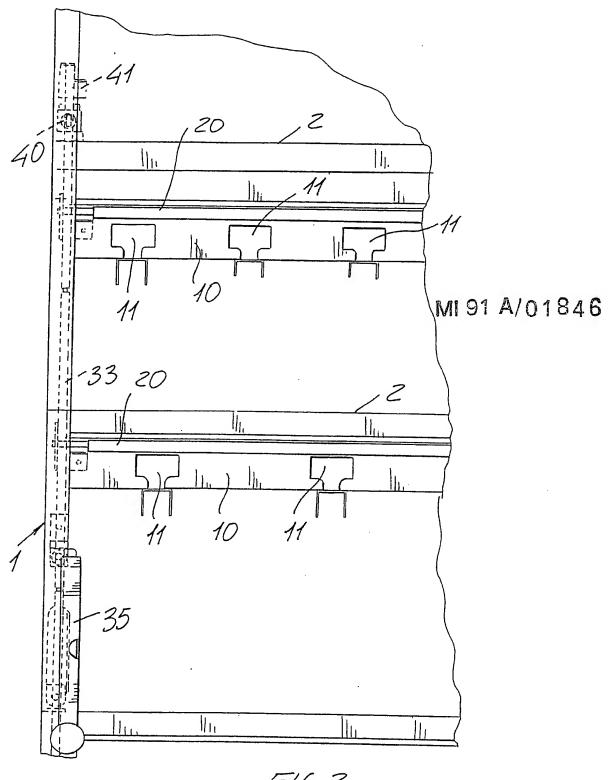
Figure 7 shows, the means-of activation of the protection sections;

Figure 8 shows the means of activation and the microswitch.

With particular reference to the numerical symbols of the aforesaid figures, the mixer shaker closet structure for paints, with protection devices, according to the invention, includes a load bearing frame, indicated globally with the reference number 1, which presents a plurality of shelves

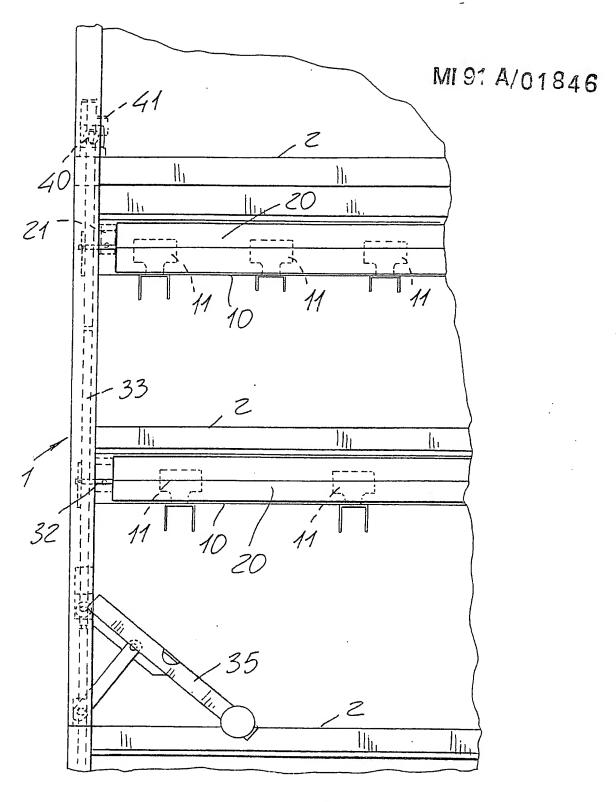
DRAFT





F14.2





F14.3



